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PatentScope

Patent Search

Results of searching in PCT for:

( mems or "micro electromechanical" or microelectromechanical ) and piezoelectric near electrode\* and substrate near electrode\*: 5 records

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(mems or "micro electromechanical" or microelectrome



Title

Pub. Date Int. Class **Applicant** 

1. (WO 2006/014203) FUNCTIONAL MATERIAL FOR

09.02.2006

MASSACHUSETTS INSTITUTE

MICRO-MECHANICAL SYSTEMS

B81B 3/00

OF TECHNOLOGY

A MEMS device includes a first material structure. A second material structure includes TiN. The second material structure is moveable relative to the first material structure.

2. (WO:2005/064701) ELECTRONIC DEVICE

14.07.2005 H01H 1/00

KONINKLIJKE PHILIPS ELECTRONICS N.V.

The microelectromechanical system (MEMS) element (101) comprises a first electrode (31) that is present on a surface of a substrate (30) and a movable element (40), which overlies at least partially the first electrode (31) and comprises a piezoelectric actuator, which movable element (40) is movable towards and from the substrate (30) by application of an actuation voltage between a first and a second position, in which the first position is separated from the substrate (30) by a gap. The piezoelectric actuator comprises a piezoelectric layer (25) which opposite surfaces is provided with a second and a third electrode (21,22) respectively, said second electrode (21) facing the substrate (30) and said third electrode (22) forming an input e...

3. (WO 2005/001948) RADIAL BULK ANNULAR RESONATOR USING MEMS TECHNOLOGY

06.01.2005 H01L 41/00 THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

A MEMS resonator includes an annular resonator body defined by an inner radius and an outer radius, a first electrode positioned within the inner radius and spaced from the resonator body, and a second electrode positioned around the annular resonator body and spaced from the outer radius. The first electrode and the second electrode provide for capacitive drive of the resonator body and capacitive sense of the resonator body. Piezo-resistive sense and piezoelectric drive/sense techniques can also be utilized. The overall extant can be smaller than 1 cm2 in area and positioned on a supporting substrate by a plurality of anchors. The substrate can comprise an RF transceiver integrated circuit with the anchors connecting the drive electrode a...

4. (WO 2004/008635) MICROELECTROMECHANICAL APPARATUS AND METHODS FOR SURFACE ACOUS TIC WAVE SWITCHING

22.01.2004 H03H 9/02 INTEL CORPORATION (a Delaware Corporation) (a Delaware Corporation)

Microelectromechanical system (MEMS) apparatus and methods for surface acoustic wave (SAW) switching are disclosed. The apparatus includes a piezoelectric substrate having spaced apart input and output SAW transducers. A MEMS switch is arranged between the input and output SAW transducers The MEMS switch has a deformable member in electromagnetic communication with one or more actuation electrodes formed on or above the substrate. The deformable member is deformable to mechanically contact the substrate to deflect or absorb a SAW generated by the input SAW transducer.

5. (WO 2003/010878) MEMS ELEMENT HAVING PERPENDICULAR PORTION FORMED FROM SUBSTRATE

06.02.2003 B81B 3/00 **ONIX MICROSYSTEMS** 

Microelectromechanical systems (MEMS) elements, optical switches and fabrication methods are described. A MEMS element (101) comprises a crystalline moveable element moveably attached to a substrate for motion substantially perpendicular to a plane of the substrate. The moveable element includes a perpendicular portion (104) oriented substantially perpendicular to the substrate. In at least one position, a part of the perpendicular portion projects beyond a surface of the substrate. The perpendicular portion and substrate have substantially similar crystal structures. The perpendicular portion may be formed from the substrate. An array of such structures can implement an optical switch.



### **RESULT LIST**

32 results found in the Worldwide database for:

Mems or "micro electromechanical" or microelectromechanical in the title AND piezoelectric and substrate in the abstract

(Results are sorted by date of upload in database)

1 Piezoelectric RF MEMS device and method of fabricating the same

Inventor: KIM JONG-SEOK (KR); SONG IN-SANG (KR); Applicant: SAMSUNG ELECTRONICS CO LTD

(+5)

EC:

IPC: H01L41/053; H01L41/00

Publication info: US2007120445 - 2007-05-31

2 RF MEMS switch and method for fabricating the same

Inventor: KIM JONG-SEOK (KR); KWON SANG-WOOK Applicant: SAMSUNG ELECTRONICS CO LTD

(KR); (+6)

EC: H01P1/12D

IPC: H01P1/10; H01P1/10

Publication info: US2007115081 - 2007-05-24

3 RF MEMS switch and fabrication method thereof

Inventor: PARK JAE-YEONG (KR); LEE HEE-CHUL (KR) Applicant:

EC: IPC: H01P1/10; H01P1/10

Publication info: US2007109081 - 2007-05-17

4 RF MEMS switch and fabrication method thereof

Inventor: PARK JAE-YEONG (KR); LEE HEE-CHUL (KR) Applicant:

EC: H01P1/12D

IPC: H04R17/00; H01P1/12; H04R17/00 (+1)

Publication info: US2007094864 - 2007-05-03

5 MEMS switch actuated by the electrostatic force and piezoelectric force

Inventor: KWON SANG-WOOK (KR); KIM JUN-O (KR); Applicant: SAMSUNG ELECTRONICS CO LTD

(+7) EC:

IPC: *H01H51/22*; H01H51/22

Publication info: US2007024403 - 2007-02-01

6 Semiconductor device using piezoelectric actuator formed by use of MEMS technique

TICELLA COMMISSION

Inventor: IKEHASHI TAMIO (JP)

Applicant: TOKYO SHIBAURA ELECTRIC CO

EC:

IPC: H01L41/00; H01L41/00

Publication info: **US2006290236** - 2006-12-28

7 METHOD FOR FABRICATING FBAR DEVICE USING MEMS METHOD

Inventor: CHO SEONG RYEOL; JANG CHONG GYU;

Applicant: ANTECHNOLOGY CO LTD

(+5)

EC:

IPC: H03H3/02; H03H3/00; (IPC1-7): H03H3/02

Publication info: KR20040052851 - 2004-06-23

8 MEMS RF SWITCH HAVING STRUCTURE SERVING AS LEVER TRANSFERRING MOTION ON UPPER PORTION TO LOWER PORTION

Inventor: CHO NAM GYU; LEE DAE SEONG; (+1)

Applicant: KOREA ELECTRONICS TECHNOLOGY

EC:

IPC: H01H59/00; H01H59/00; (IPC1-7): H01H59/00

Publication info: KR20040099808 - 2004-12-02

9 FLEXIBLE MEMS TRANSDUCER, METHOD FOR MANUFACTURING THE SAME AND FLEXIBLE MEMS WIRELESS MICROPHONE

Inventor: LEE SUK HAN; NAM YUN U

Applicant: SAMSUNG ELECTRONICS CO LTD

EC: B81B3/00K; B81B3/00M2D; (+2)

IPC: H04R17/02; B81B3/00; H01L41/09 (+10)

Publication info: KR20040026756 - 2004-04-01 .

10 Semiconductor device formed by using MEMS technique

Inventor: IKEHASHI TAMIO (JP)

Applicant: TOKYO SHIBAURA ELECTRIC CO



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Search

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((relay or switch)) <AND> ( ( mems of

Query: ((relay or switch)) <AND> ( ( (mems or "micro electromechanical" or microelectromechanical) ) <in> abstract ) <AND> ( ( (piezoelectric and substrate and electrode\*) ) <in> claims )

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1	BRS	L1	33	piezoelectric adj3 (relay or switch) same electrode same substrate	FPRS; EPO; JPO;	2007/06/1 1 14:55	

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